

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No.: 10/024,187

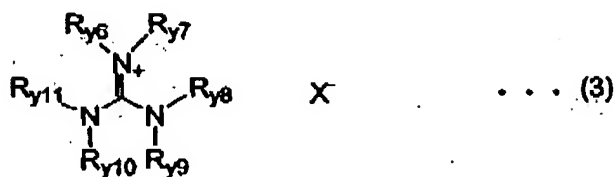
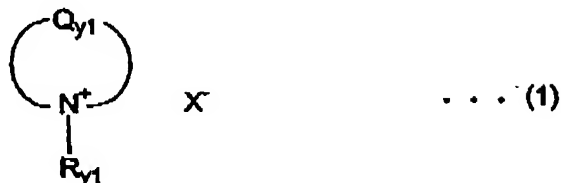
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1 (currently amended). An electrolyte composition comprising: a molten salt represented by any of the following general formulae (1), (2) and (3); a polymer prepared by a reaction between an electrophile having at least two unsaturated bonds polarized by an electron-withdrawing group and a nucleophile having a plurality of nucleophilic groups; and a metal salt containing a Group IA metal ion or a Group IIA metal ion[.]

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In the wherein, in general formulae (1), (2) and (3), Q_{y1} represents an atomic group forming an aromatic cation having a 5- or 6-membered ring structure with the nitrogen atom, A_{y1} represents a nitrogen atom or a phosphorus atom, R_{y1} to R_{y1} independently represent a substituted or unsubstituted alkyl group or a substituted or unsubstituted alkenyl group, X⁻ represents an anion, two or more of R_{y2} to R_{y5} in the general formula (2) optionally bond together to form a non-aromatic ring containing A_{y1}, and two or more of R_{y6} to R_{y11}, in the general formula (3) optionally bond together to form a ring.

2 (original). The electrolyte composition according to claim 1, wherein said

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Q₁ is composed of atoms selected from the group consisting of carbon, hydrogen, nitrogen, oxygen and sulfur atoms.

3 (original). The electrolyte composition according to claim 1, wherein said aromatic cation formed by said Q is an imidazolium cation or a pyridinium cation.

4 (original). The electrolyte composition according to claim 1, wherein said electron-withdrawing group is selected from the group consisting of a sulfonyl group, a cyano group and a carbonyl group.

5 (original). The electrolyte composition according to claim 1, wherein said nucleophilic groups are selected from the group consisting of -NH₂, -SH, -S-, -SO₂H and -SO₂-.

6 (original). A non-aqueous electrolyte secondary cell comprising the electrolyte composition recited in claim 1.

7 (new). A process for manufacturing the electrolyte composition of claim 1, which process comprises adding an electrophile and a nucleophile to the molten salt of claim 1, and reacting the electrophile and the nucleophile by a Michael-type addition reaction to thereby form a cross-linked polymer, wherein the electrophile has at least two polarized unsaturated bonds polarized by an electron-withdrawing group and the nucleophile has a plurality of nucleophilic groups, wherein the nucleophilic groups are selected from the class consisting of -NH₂, -SH, -S-, -SO₂H, -SO₂-, -OH and -COOH.